

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently amended): A method to enhance bone formation in a vertebrate animal which method comprises administering to a vertebrate animal in need of such treatment an effective amount of a compound that inhibits proteasomal activity and said compound being selected from the group consisting of a peptidyl aldehyde, ~~pentoxifylline (PTX)~~ and epoxomicin, whereby bone formation is enhanced in said vertebrate animal.

Claims 2-4(Canceled)

Claim 5 (Currently Amended): The method of claim 1 wherein said vertebrate animal is characterized by a condition selected from the group consisting of osteoporosis, bone fracture or deficiency, primary or secondary hyperparathyroidism, metastatic bone disease, osteolytic bone disease, and post-plastic surgery that benefits from bone healing.

Claim 6 (Original): The method of claim 1 which further comprises administering to said subject one or more agents that promote bone growth or that inhibit bone resorption.

Claim 7 (Original): The method of claim 6 wherein said agents are selected from the group consisting of bone morphogenetic factors, anti-resorptive agents, osteogenic factors, cartilage-derived morphogenetic proteins, growth hormones, estrogens, bisphosphonates, statins and differentiating factors.

Claims 8-18 (Canceled)

Claim 19 (Previously presented): The method of claim 1, wherein the compound is a peptidyl aldehyde.

Claim 20 (Canceled)

Claim 21 (Previously presented): The method of claim 1, wherein the compound is epoxomicin.

Claim 22 (Previously presented): The method of claim 1, wherein the vertebrate animal is a human.

Claim 23 (Previously presented): The method of claim 1, wherein the vertebrate animal is a non-human mammal.